

## **Maryland Department of the Environment**

### **Fiscal Year 2005 Capital Budget Presentation Response to the Department of Legislative Services**

#### ***Maryland Water Quality Revolving Loan Fund***

##### **Issue**

**The Maryland Department of the Environment (MDE) brief the committee on the current status of BNR and ENR upgrades and the programmatic and fiscal impacts of the administration's sewage surcharge proposal. Since the surcharge is proposed for use for only ENR upgrades, and many WWTPs are not operating at the BNR level, the success of this proposal hinges on the ability of local jurisdictions to secure the funds necessary to participate in WQRLF. MDE should discuss whether local jurisdictions have the resources to move forward with BNR upgrades within the timeframe envisioned in the Administration's ENR initiative. Furthermore, MDE should be prepared to discuss:**

- a) why only 30 of the 43 facilities with BNR technology in operation are operating at the BNR level;
- b) whether the proposed ENR upgrade implementation schedule is overly ambitious;
- c) the reaction of businesses and local jurisdictions to the sewage surcharge proposal;
- d) other MDE programs that assist smaller jurisdictions with nutrient reduction; and
- e) the likelihood of imposing non-voluntary targets for nutrient reduction on local jurisdictions.

**Furthermore, the U.S. Environmental Protection Agency recently announced that its 2005 budget request to Congress includes \$10.0 million for federal grants to reduce pollution entering the Chesapeake Bay and for a regional pilot program aimed at encouraging WWTPs to collaborate with non-point nutrient sources. If approved, MDE should discuss the impact that this funding would have on Maryland.**

The Maryland Water Quality Revolving Loan Fund (WQRLF) has the capacity to meet the local share of Biological Nutrient Removal (BNR) funding requirements, as long as the State continues to provide grants for 50% of the eligible planning, design and construction costs of BNR upgrades. It is important that the BNR grant program continue since there are still 23 major sewage treatment plants that have committed to install BNR upgrades and are not yet complete. Funding for the BNR program must continue until these upgrades are completed. The proposed legislation, if approved by the legislature, will provide the funding needed to upgrade facilities from BNR to Enhanced Nutrient Removal (ENR). Full implementation of BNR and ENR at the State's major sewage treatment plants is needed to restore Chesapeake Bay water quality.

- a) As of January 2004, 30 of the 43 plants in operation are performing at 8 mg/l or better. The remaining 13 are in various stages of project closeout to determine whether the process components are constructed and functioning as designed and to make adjustments needed to meet the performance criteria. As an aside, weather also affects the efficiency of the BNR processes; at very cold-water temperatures, the biological processes are impeded.

- b) The proposed implementation schedule, to begin construction of ENR facilities in 2005, phasing in additional plants each year in order to begin construction of all 66 major facilities by 2009 and complete construction by 2011, is very ambitious. Meeting this schedule will require that all local governments fully cooperate, that design problems are handled quickly and that construction proceed without delay or cost over-runs.
- c) The reaction of businesses and local jurisdictions to the sewage surcharge proposal has been mixed. Some businesses have indicated that the fee is appropriate; others believe that it is too high given the economic stresses they are facing. Local jurisdictions (municipal, county and WSSC representatives) from the Washington Metropolitan region on the Council of Government's Chesapeake Bay Policy Committee were briefed on the details of the bill and were supportive of the concept and interested in seeing the details.
- d) MDE uses the Supplemental Assistance grant program to increase the percentage of state grant participation in BNR/ENR projects for smaller and financially disadvantaged communities. This program provides an additional 25% State share to reduce the local share to 25% of eligible project costs.
- e) There will eventually be mandatory nutrient permit limits on all dischargers, including industries and local jurisdictions, unless the water quality standards are achieved first. The federal Clean Water Act requires that states monitor their waters to determine where water quality standards are not being achieved, develop estimates of the quantity of a pollutant that can be discharged from all sources and not violate water quality standards (the Total Maximum Daily Load or TMDL) and implement discharge permits and nonpoint source control measures to ensure that the TMDL is achieved. MDE has a few EPA approved TMDLs that do require nutrient limits in permits and nutrient permit limits have been or soon will be imposed for facilities in those watersheds. There is no nutrient TMDL currently in place for Chesapeake Bay, however, there is a court order in place that requires EPA to develop and implement a TMDL for Chesapeake Bay by 2011 if the states have not either achieved the water quality standards or implemented their own TMDL for Chesapeake Bay that will result in achievement of water quality standards.

The Chesapeake 2000 agreement commits the signatory jurisdictions (MD, VA, PA, DC) to develop and implement strategies (Tributary Strategies) to achieve the water quality standards for the Chesapeake Bay and its tributaries by 2010 and thereby avoid the requirement for a Bay-wide TMDL.

EPA recently announced that its 2005 budget request to Congress includes \$10.0 million for federal grants to reduce pollution entering the Chesapeake Bay. MDE believes that, if approved, this program will have minimal impact on Maryland's point source efforts. The \$10 million is for the entire Chesapeake Bay region, not just Maryland. The funds will be awarded as competitive grants. Given the amount of funds needed to implement the capital intensive ENR program, this is not likely to affect that program. However, the funds could be used to develop nutrient trading programs, develop and implement other tools such as stormwater utility fee systems, and other innovations to reduce pollution.

### **Recommended Actions**

**Concur with Governor's Allowance.**

### **Department Response:**

The department accepts this recommendation.

## ***Maryland Drinking Water Revolving Loan Fund***

### **Recommended Actions**

**Concur with Governor's Allowance.**

### **Department Response**

The department accepts this recommendation.

## ***Hazardous Substance Cleanup Program***

### **Recommended Actions**

**Reduce funds by \$500,000.**

### **Department Response**

The department does not accept this recommendation. As discussed in the 2003 legislative budget hearings, MDE anticipated starting the fiscal 2004 projects in the spring of 2004. MDE received \$550,000 in FY 2004 for planning, with the expectation that additional funds would be required in FY 2005 to complete remediation. Following the March 24, 2004 Board of Public Works meeting, the department expects to have encumbered all the FY 2004 appropriation.

The recommended reduction will result in delayed completion of the cleanup of the Skipjack Chemical (Caroline County) and Dwyer (Cecil County) sites until fiscal 2006. The Skipjack site was a chemical blending and distribution facility with solvent and metal contaminants in both the soil and groundwater. The Dwyer site was previously used for the manufacture of incendiary flares with a presence of dense non-aqueous phase liquid, a free product of chlorinated solvent in the shallow groundwater.

Once cleanup begins at a site, it is imperative that it be completed and not be interrupted as the disturbance of the soils may lead to further environmental damage. The department has already initiated the planning and project design for these sites, and we are expecting to complete the cleanup of these projects in the fall of 2004. Furthermore, the department would not be able to start the planning and remedial design of the Sauer Dump (Baltimore County), which is currently impacting Back River with polychlorinated bi-phenyl (PCBs). This site was initially scheduled for cleanup in FY 2003, but due to the high levels of PCBs, EPA agreed to do a removal of the "PCB hot spots". MDE will perform additional cleanup with this FY 2005 appropriation and anticipates completion in 2006. The State – EPA joint effort will result in great saving to the state.

## ***Biological and Enhanced Nutrient Removal Program***

### **Issues**

**1. The Department should comment on why \$46.2 million in fiscal 2003 and prior year fund balances remain unexpended.**

Due to the time required for preliminary engineering and pilot studies prior to design and construction, and the large costs associated with retrofitting and converting WWTPs for nutrient removal, State funding for BNR/ENR projects is committed over a multi-year time frame to ensure that adequate funds are in place to allow construction to be initiated. For some of the larger BNR projects, design may take as long as two years and construction schedules are typically as long as three years. MDE's budget request takes into account these project schedules, as well as

the preliminary budget schedules of local governments for the 50% local share of funds. Initiation of construction of these major sewage treatment plant upgrades often depends on both state grant funds and local matching funds being available. In some cases, the local governments have their own budget cycles and priorities where local funds are not committed until State grant funds have been encumbered. Once all funds are committed and construction can be initiated, significant expenditures follow.

To date there is an unexpended balance of \$46 million. Of this balance \$5.1 million is encumbered to projects in planning; \$28.9 million to projects in design; \$7.4 million to projects currently under construction; and \$4.6 million to projects that are complete but for which MDE is awaiting final inspection and submission of all remaining invoices (administrative closeout).

**2. The department should discuss how this program's fiscal 2005 funding and projects will be impacted should Senate Bill 320/House Bill 555 be enacted.**

The proposed legislation, if enacted, will provide the dedicated funding needed to upgrade facilities from BNR to ENR. The proposed implementation schedule, to begin construction of ENR facilities in 2005, phasing in additional plants each year in order to begin construction of all 66 major facilities by 2009 and complete construction by 2011, is very ambitious, but necessary to improve Chesapeake Bay water quality and to avoid federal intervention. Meeting this schedule will require that all local governments fully cooperate, that design problems are handled quickly and that construction proceed without delay or cost over-runs. Most importantly, this schedule will require the completion of the remaining 23 major BNR upgrades. Funding for the BNR program must continue until these upgrades are completed.

To date, there are five (5) facilities completing BNR construction and 16 facilities in various stages of BNR design or planning. Should the Senate Bill 320/House Bill 555 be enacted, the \$23.5 million requested in the FY 2005 budget will be used to complete BNR design and construction, which precede ENR implementation. The BNR funding requested in FY 2005 and increased funding in future years are needed to complete BNR upgrades. Completion of the BNR projects will facilitate construction schedules of the ENR projects.

**Recommended Actions**

**Reduce funds by \$9.5 million.**

**Department Response**

The department does not accept this recommendation. A reduction in funding for the BNR Program will send the wrong message to Maryland's local governments, who are expecting the State to stay the course to maximize nutrient reductions from their wastewater facilities. More importantly, without adequate State funding for BNR, the ENR Program cannot move ahead. The fee established in HB 555 will not pay for BNR costs, which remain a 50/50 partnership between the State and local governments. Failure to fund the BNR Program aggressively, as is reflected in the Governor's 2005 and future capital budgets, will delay the implementation of ENR. This will in turn cause a significant delay in Maryland's commitment to further reduce nitrogen and phosphorus pollution to the Bay.

The proposed \$9.5 million reduction in Nutrient Removal Funds would impact 15 BNR projects, all of which have received previous grant funds from MDE. (see Attachment 1). All of the projects listed in the FY 2005 request are actively evaluating design options, have designs underway or are ready to bid and award their upgrades in the fiscal year. MDE and the State in general cannot afford to derail this program, which is **the** point source strategy for Maryland.

### *Supplemental Assistance Program*

#### **Recommended Actions**

**Concur with Governor's Allowance.**

#### **Department Response**

The department accepts this recommendation.

### *Small Creeks and Estuary Restoration Program*

#### **Recommended Actions**

**Concur with Governor's Allowance.**

#### **Department Response**

The department accepts this recommendation.

### *Stormwater Pollution Control Program*

#### **Recommended Actions**

**Concur with Governor's Allowance.**

#### **Department Response**

The department accepts this recommendation.

### *Water Supply Assistance Fund Program*

#### **Issue**

**The Maryland Department of the Environment (MDE) has only expended \$5.0 million, or 58% of the \$8.5 million appropriated in fiscal 2000 through 2003. MDE should explain the program's slow expenditure rate.**

Expenditure of authorized funds is a high priority for MDE. The Department is actively monitoring and aggressively managing the rates of expenditure and elimination of older bond funds. There is an inherent lag in the expenditure of funds as project completion takes, on average, from three to five years. Local government can experience unforeseen delay or otherwise affect the rate of expenditure, as follows:

- In many instances, the Water Supply Program grants are used in conjunction with loans and grants from other State and federal funding sources available to low-income areas, such as the Maryland Drinking Water Revolving Loan Fund (DWRLF) Program, Small Cities Community Development Block Grant Program, and the USDA Rural Development Program. Leveraging State funds gives Maryland the ability to finance a greater number of drinking water projects but can also delay expenditures until all sources of funding are in place.
- Unforeseen project delays can also impede the rate of expenditures: inclement weather; need to obtain regulatory permits; acquisition of rights of way; unanticipated engineering problems; litigation; local citizens opposition; or other factors.
- While some capital projects are proceeding on schedule, expenditures may be delayed due to billing preferences of local governments where some jurisdictions pay contractors with local funds

and request reimbursement from MDE at a later date; or may use other fund sources first for projects with leveraged funding.

In accordance with the law passed in the 2003 session of the Maryland General Assembly, MDE expects that appropriations be fully expended within seven years.

**Recommended Actions**

**Concur with Governor's Allowance.**

**Department Response**

The department accepts this recommendation.

**Maryland Department of the Environment  
Biological and Enhancement of Nutrient Removal**

**Projects that will be cut due to \$9.5 million reduction**

<b>COUNTY</b>	<b>LEG DIST</b>	<b>PROJECT</b>	<b>EST. COST</b>	<b>PRIOR AUTHOR</b>	<b>FY 2005 AMOUNT</b>	<b>TYPE (APCSE)</b>	<b>FUTURE REQUEST</b>
Talbot	36	Easton BNR/ENR	10,000,000	100,000	204,250	P,C	2,604,250
Frederick	3B	Ballenger ENR	1,000,000	50,000	50,000	P	400,000
Allegany	1B	George's Creek BNR/ENR	4,000,000	1,000,000	100,000	C	900,000
Queen Anne's	36	Centreville BNR/ENR	8,016,039	3,452,482	200,000	C	355,538
Kent	36	Chestertown BNR/ENR	4,600,000	1,000,000	800,000	C	500,000
Howard	13B	Little Patuxent ENR	10,000,000	100,000	500,000	P	4,400,000
Charles	28	Mattawoman BNR/ENR	20,000,000	5,698,571	2,100,000	C	2,201,429
Allegany	1B	Celanese BNR	5,791,500	2,550,000	345,750	C	0
Montgomery	55	Blue Plains BNR	28,000,000	10,773,009	1,200,000	C	2,026,991
Anne Arundel	30	Annapolis ENR	6,000,000	100,000	200,000	P	2,700,000
Cecil	35B	Elkton BNR/ENR	10,000,000	900,000	2,000,000	P,C	2,100,000
Prince George's	27	Piscataway ENR	12,000,000	100,000	200,000	P	5,700,000
Montgomery	15	Poolesville BNR/ENR	2,658,000	550,000	500,000	C	279,000
Montgomery	15	Damascus ENR	2,000,000	100,000	100,000	P	800,000
Queen Anne's	36	Kent Island BNR/ENR	23,742,570	8,725,817	1,000,000	C	2,145,468
<b>Total</b>					<b>9,500,000</b>		